to any of these forms, that specific name will have to be retained for the combined species which may be characterized by the following description:

## PODOSPHÆRA OXYACANTHÆ (DC.)

Erysiphe Oxyacanthæ, DC.; Podosphæra clandestina (Wallr.) Lev.; P. myrtellina, Kunze (?); P. tridactyla (Wallr.) De Bary; P. Kunzei, Lev.; Alphitomorpha tridactyla, Wallr.; Podosphæra minor, Howe.

Mostly amphigenous; perithecia .0025 in. to .00375 in. in diameter, dark brown, reticulations large and prominent; appendages variable, from four or five to twenty or more, septate, colored for half or more of their length, variously parted, tips sometimes much swollen; ascus oval, thick walled; spores 8.

Podosphæra biuncinata, C. and P. on Hamamelis, is a distinct, well marked species, having long, slender hyaline append-

ages.

## Additions to the Habitats of N. American Sphagna.

For several years past the writer has made excursions into the southern parts of New Jersey in order to examine and note the distribution of the various species of *Sphagnum*, and the most important results are herewith given. The varieties new to this country are indicated in small caps.

Sphagnum Portoricense, Hampe, occurs in ponds at Pleasant Mills, Atlantic Co.; at Atsion & Brown's Mills, Burlington Co.; at Malaga, Cumberland Co., and at Willow Grove, Gloucester Co.

Sphagnum imbricatum, Hernsch. (S. Austini, Sull.), occurs in swamps at Toms River, Ocean Co.; at Atsion, Burlington Co.; near Newfield, Gloucester Co.; also in the northern part of New Jersey, at Budds Lake, Morris Co.

Dr. G. Martin, of West Chester, Pa., while in Florida, during the month of March, this year, sent me a lot of Sphagna for identification, amongst which I was fortunate enough to detect a number of plants of S. imbricatum, Hornsch. This species has not, to my knowledge, been heretofore found south of New Jersey.

Sphagnum papillosum, Lindbg., is found in bogs near Toms River, Ocean Co.; Atsion and Quaker Bridge, Burlington Co., and in fruit near Name all Co.

and in fruit near Newfield, Gloucester Co.

I am under obligation to my friend Mr. A. B. Seymour, of Cambridge, Mass., for aid in establishing the nomenclature of this subject, as well as for many of the specimens from which the above descriptions are taken.

Var. CONFERTUM, Lindbg., near Newfield, Gloucester Co.; Sphagnum cymbifolium, Ehrh., var. squarrosulum (Nees.) in bogs, Atsion, Burlington Co.

Var. congestum, Schimp. (var. purpurascens, Russow.,) oc-

curs near Newfield, Gloucester Co.

Sphagnum acutifolium, Ehrh., var. Deflexum, Schimp.,

margins of bogs, Newfield, Gloucester Co.

Var. ELEGANS, Braithw., open bogs, Atsion, Burlington Co. Sphagnum subsecundum, Nees., var. Auriculatum, (Schimp.) Lindbg., swamps near Newfield, Gloucester Co.

Var. obesum, Wils., swamps near Atsion, Burlington Co. Sphagnum neglectum, Angstr. var., swamps near Newfield,

Gloucester Co.

Sphagnum macrophyllum, Bernh., in ponds at Willow Grove, Cumberland Co., and Malaga, Gloucester Co.

EUGENE A. RAU, Bethlehem, Pa.

## GENERAL NOTES.

Vitis riparia.—As represented in this locality this is a strong, vigorous climber, growing in bottoms and low grounds along streams; the flowers appear from one to two weeks later than any other species of Vitis here, but the fruit is ripened remarkably soon.

Usually we have ripe grapes the first week in July, but this season was very backward with late frosts, and I saw no ripe fruit until the 12th of July, while the so-called Summer grape (V. æstivalis) ripens its fruit about the middle of September. Now, as our manuals call this a Winter or Frost Grape, and it is so stated in the Floras of Iowa and Michigan, I would inquire if this is the usual habit of the plant in other localities?

The panieles are shorter and closer, with smaller and sweeter berries than

those of V. cordifolia.

Here it is called Fox, Slue, or Sioux Grape.—Frank Bush, Independence, Missouri.

Graphephorum festucaceum, Gray.—Last July, while collecting Scirpus fluviatilis, Gray, in a small slough about a quarter of a mile west of my house, I found a grass which proves to be an interesting discovery. Judging it to be a Graphephorum, though differing from the description of the single species and its variety major in the Manual, I sent it to Dr. Gray for determination, who promptly reported it to be Graphephorum festucaceum, Gray, (Arundo festucacea, Willd.), for the first time in the United States so far as he knew, and who requested me to announce this addition to our flora in the BOTANICAL GAZETTE. He adds, however, that it abounds in the Saskatchewan region, and is well